DISCUSSION OF THE CLAIMS

Claim 14-27 and 30-38 are pending in the present application. Claims 1-13 and 28-29 are canceled claims. Claims 14-24 and 36-37 are presently withdrawn from active prosecution.

The claims are not amended in the present response.

No new matter is added.

REMARKS

Applicants thank Examiner Walters for the helpful and courteous discussion of June 30, 2009. During the discussion the Examiner kindly indicated that the rejections under 35 U.S.C. §112 and §103 may be withdrawn pending review of Applicants' written response.

35 U.S.C. § 112

The Office rejected Claims 25-27, 30-35 and 38 for failing to comply with the written description requirement on the following grounds: (i) the Office alleges that the 0.01-1% by weight range of nanostructured particle was not described in the original specification, and (ii) the Office alleges that the average particle diameter range of 30-100 microns was not described in the original specification.

The Office's guidelines with respect to the written description requirement under 35 U.S.C. § 112, first paragraph are set forth in M.P.E.P. § 2163. In the May 20, 2009 Office Action the Office cites to *In re Smith*, 173 USPQ 679, 683 (CCPA 1972) and *In re Lukach*, 169 USPQ 795 (CCPA 1971) as legal precedent supporting the rejection of the claims under 35 U.S.C. § 112, first paragraph. The aforementioned CCPA decisions are referenced in M.P.E.P. § 2163(I)(B) which states, in part:

Thus, the written description requirement prevents an applicant from claiming subject matter that was not adequately described in the specification as filed. New or amended claims which introduce elements or limitations which are not supported by the as-filed disclosure violate the written description requirement. See, e.g., *In re Lukach ... In re Smith...*

The M.P.E.P. cites to *Smith* and *Lukach* for legal precedent regarding new or amended claims that contain limitations "which are not supported by the as-filed disclosure". The crucial words in the M.P.E.P., and the facts crucial to the decisions in *Lukach* and *Smith*,

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revolve around fact situations in which an applicant attempted to amend claims to include new limitations not found in the as-filed disclosure.

The facts at bar are different. The Office alleges that the average diameter and % by weight ranges recited in Claim 25 were not disclosed in the original specification.

Nonetheless, as admitted by the Office, the original specification provides explicit written support for both the upper and the lower thresholds of the ranges for both the average particle diameter and % by weight ranges. The Office's reliance on *Lukach* and *Smith* is misplaced.

The administrative guidelines put forth by the USPTO at M.P.E.P. § 2163.05(III) are relevant to the present facts. As admitted by the Office, the ranges recited in present Claim 25 are derived from the explicit disclosure of the original application (see pages 2-4 of the May 20 Office Action). Under the USPTO guidelines set forth at M.P.E.P. § 2163.05(III), and as supported by CCPA precedent, the average particle diameter and % by weight ranges recited in the present claims should be found to be supported by the as-filed disclosure. For convenience, M.P.E.P. § 2163.05(III) is reproduced below:

With respect to changing numerical range limitations, the analysis must take into account which ranges one skilled in the art would consider inherently supported by the discussion in the original disclosure. In the decision in *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976), the ranges described in the original specification included a range of "25%-60%" and specific examples of "36%" and "50%." A corresponding new claim limitation to "at least 35%" did not meet the description requirement because the phrase "at least" had no upper limit and caused the claim to read literally on embodiments outside the "25% to 60%" range, however a limitation to "between 35% and 60%" did meet the description requirement.

See also *Purdue Pharma L.P. v. Faulding Inc.*, 230 F.3d 1320, 1328, 56 USPQ2d 1481, 1487 (Fed. Cir. 2000) ("[T]he specification does not clearly disclose to the skilled artisan that the inventors... considered the... ratio to be part of their invention.... There is therefore no force to *Purdue*'s argument that the written description requirement was satisfied because the disclosure revealed a broad invention from which the [laterfiled] claims carved out a patentable portion"). Compare *Union Oil of Cal. v. Atlantic Richfield Co.*, 208 F.3d 989, 997, 54

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USPQ2d 1227, 1232-33 (Fed. Cir. 2000) (Description in terms of ranges of chemical properties which work in combination with ranges of other chemical properties to produce an automotive gasoline that reduces emissions was found to provide an adequate written description even though the exact chemical components of each combination were not disclosed and the specification did not disclose any distinct embodiments corresponding to any claim at issue. "[T]he Patent Act and this court's case law require only sufficient description to show one of skill in the . . . art that the inventor possessed the claimed invention at the time of filing.").

Applicants respectfully request withdrawal of the rejections for written description requirement.

35 U.S.C. § 103

The Office further rejected the claims as obvious under the meaning 35 U.S.C. § 103(a) over <u>Sekutowski</u> (U.S. 6,156,327). Applicants traverse the rejection for the reason that the <u>Sekutowski</u> composition is excluded from the composition of the present claims.

As mentioned above, present independent Claim 25 recites ranges for the average diameter of the nanostructured particle (i.e., $30\text{-}100~\mu\text{m}$) and the % by weight of the nanostructured particle in the claimed composition (i.e., 0.01-1% by weight). The Office admits the following:

Sekutowski teaches the particles being present in about 1.5% by weight of the suspension, however fails to teach the particle present in 0.01 to 1% by weight, and also fails to teach the particles having an average diameter of from 30 to 100 microns.

See the sentence bridging pages 6 and 7 of the May 20 Office Action.

However, Sekutowski clearly defines an upper threshold of particle size:

The term "finely divided" when utilized herein means that the particulate materials have a median individual particle size below about 10 μ m and preferably below about 3 μ m and more preferably the median particle size is about one micron or less.

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See column 4, lines 1-5 of Sekutowski.

In contrast, the minimum average particle size recited in present Claim 25 is 30 μ m, a value that is 200% greater than the maximum value of the cited art. Applicants submit that such a difference is unobvious for the reason, e.g., that such differences are mutually exclusive of one another.

With respect to the % by weight range requirement of the present claims, the maximum amount of nanostructured particle in the claimed composition is 1% by weight. Sekutowski, at best, discloses a content of 1.5% by weight of particulate matter in the compositions of the cited art. The Office puts forth no reasonable basis for asserting that the range of percent by weight recited in the present claims is obvious over the 1.5% by weight amount of the composition of Sekutowski.

As explained above in detail, the Office has not met its burden to set forth a *prima* facie case of obviousness. Applicants thus respectfully request withdrawal of the rejection and the allowance of all now-pending claims.

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REQUEST FOR REJOINDER

Claims 14-24 and 36-37 are presently withdrawn from active prosecution. Upon identifying allowable subject matter, the Office is requested to rejoin and allow the presently withdrawn claims. Each of the presently withdrawn claims is directly or indirectly dependent from the presently active claims (i.e., Claim 25).

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND, MAIER & NEUSTADT, P.C. Norman F. Oblon

Stefan U. Koschmieder, Ph.D. Registration No. 50,238

Customer Number 22850

Tel: (703) 413-3000 Fax: (703) 413 -2220 (OSMMN 08/07)